

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Environmental Assessment**

**Permitting and Compliance Division**  
**Water Protection Bureau**

**Name of Project:** Montana Tunnels Mine

**Type of Project:** Open Pit Mine and Mill

**Location of Project:** Within Sections 8, 9, 16 and 17 of Township 7 North Range 4 West

**City/Town:** 6 Miles west of Jefferson City Montana

**County:** Jefferson

**Description of Project:** The proposed action is issuance and renewal of MPDES permit number MT0028428 to applicant Montana Tunnels Inc. Montana Tunnels Mine is an active mining and milling facility operating since 1986. Currently, permitted operations under Metal Mine Reclamation Act operating permit number 00113 are nearing an end of permitted life of mine. However, in July 2004 Montana Tunnels Inc applied for a major amendment to its operation permit which would result in an expansion of mining activities and an extension of mine life. The Environmental impacts associated with the Montana Tunnels Mine were analyzed by a draft EIS published in 1985 and adopted by the Department on January 1, 1986. Environmental impacts of the proposed mine expansion are currently being analyzed by the Department. This analysis is tiered to those analyses and is specifically concerned with potential water quality impacts from issuance and renewal of the proposed discharges under the MPDES permit.

**Agency Action and Applicable Regulations:** The proposed action is renewal of individual Montana Pollutant Discharge Elimination System (MPDES) permit authorizing discharge of mine dewatering wastewater and other mine drainage from disturbed areas through an existing outfall, Outfall 001, and an additional Outfall 002 that has not been permitted to date. The proposed MPDES permit, number MT0028428, has been drafted pursuant to the Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated; the Federal Water Pollution Control Act ("Clean Water Act") 33 U.S.C. §1251 *et seq.*; and, Administrative Rules of Montana 17.30.501 *et seq.*, 17.30.601 *et seq.*, 17.30.701 *et seq.*, 17.30.1201 *et seq.* and 17.30.1301 *et seq.*

**Summary of Issues:** Outfall 001 and 002 discharge to ephemeral and dewatered reach within a B-1 watershed of unnamed tributary to Spring Creek, called Pen Yan Creek. Therefore, in the vicinity of the proposed discharges the specific numeric water quality standards do not apply. In accordance with the applicable water quality standards including minimum treatment requirements, technology based effluent limits have been applied to the proposed discharges as well as other narrative limitations. Monitoring is required to ensure compliance with the numeric permit effluent limits and applicable narrative water quality standards for toxicity.

## Affected Environment & Impacts of the Proposed Project:

Y = Impacts may occur (explain under Potential Impacts).

N = Not present or No Impact will likely occur.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N] The permittee has never reported a discharge in 20 + years of operation. The proposed numeric limits in the permit are based on minimum treatment requirement water quality standards, which incorporate by reference the applicable technology based limits. These limits are believed to sufficiently protective of water quality under hydrologic conditions that would results in a discharge event.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] The facility currently maintains and is compliant Montana Air Quality Permit # 1986. No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft"

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
	(1985) and “Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement” (1986) onfile with the Department for details and full disclosure.
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See “Montana Tunnels Project Environmental Impact Statement Draft” (1985) and “Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement” (1986) onfile with the Department for details and full disclosure.
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed)	[N] The MPDES permit does not authorize extraction of or constitute a legal right to the usage of limited land, water, air, or energy resources. See “Montana Tunnels Project Environmental Impact Statement Draft” (1985) and “Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement” (1986) onfile with the Department for details and full disclosure.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See “Montana Tunnels Project Environmental Impact Statement Draft” (1985) and “Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement” (1986) onfile with the Department for details and full disclosure.

<b>IMPACTS ON THE HUMAN ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See "Montana Tunnels Project Environmental Impact Statement Draft" (1985) and "Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement" (1986) onfile with the Department for details and full disclosure.

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<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See “Montana Tunnels Project Environmental Impact Statement Draft” (1985) and “Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement” (1986) onfile with the Department for details and full disclosure.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit. See “Montana Tunnels Project Environmental Impact Statement Draft” (1985) and “Montana Tunnels Project Notice of Adoption of Draft Environmental Impact Statement” (1986) onfile with the Department for details and full disclosure.
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] No impacts will likely occur due to renewal of the MPDES permit and discharge of wastewater as authorized by the permit.
22(a). PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[N]
22(b). PRIVATE PROPERTY IMPACTS: Is the agency proposing to deny the application or condition the approval in a way that restricts the use of the regulated person's private property? If not, no further analysis is required.	[ ]
22(c). PRIVATE PROPERTY IMPACTS: If the answer to 21(b) is affirmative, does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.	[ ]

23. Description of and Impacts of other Alternatives Considered:

A. No Action: The no action alternative is to not renew the expired permit such that it would remain administratively extended with existing permit limits and monitoring for Outfall 001. The existing permit does not include Outfall 002; therefore, the no action alternative would result in no limits for this potential discharge point and no monitoring requirements to ensure compliance with the applicable water quality standards.

B. Renewal and Modification Permit Action: The permit renewal and modification action regulates discharge from Outfall 002 based on the most stringent applicable water quality standards and requires monitoring of discharges from this outfall, which was previously unregulated. The renewal and permit modification action also includes narrative limits for effluent toxicity based on the lowest applicable narrative standard for both Outfalls and incorporates Whole Effluent Toxicity monitoring to ensure compliance with the limits.

24. Summary of Magnitude and Significance of Potential Impacts: This EA finds no significant impacts are likely to occur due to renewal of the proposed MPDES permit and discharge in accordance with the permit. Numeric and narrative permit limits are based on the lowest applicable water quality standards.

25. Cumulative Effects: Historic mining activity upstream of the Montana Tunnels Mine has been documented to impact water quality within Pen Yan Creek upstream and at the Montana Tunnels Mine site. Analytical results indicate that estimated effluent quality from Outfall 001 and 002 is of better quality than that in the creek that is impacted from historic mining activity under hydrologic conditions that might cause these outfalls to discharge. Other than the major amendment for expansion of the existing Montana Tunnels Mine, no known proposals for new facilities causing cumulative impacts exist at this time.

26. Preferred Action Alternative and Rationale: Issue the renewed and modified permit.

**Recommendation for Further Environmental Analysis:**

☐ EIS    ☐ More Detailed EA    ☒ No Further Analysis

Rationale for Recommendation: Finding of no significant impacts or cumulative effects documented at number 24 and 25 of this document.

27. Public Involvement: This permit and EA are being posted for public comment on June 18, 2007. The comment period will close July 17, 2007.

28. Persons and agencies consulted in the preparation of this analysis: DEQ Environmental Management Bureau Hard Rock Mining Section and DEQ Air Resources Management Bureau were consulted during this EA analysis.

**EA Checklist Prepared By:**

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Paul Skubinna

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Date

**Approved By:**

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Bonnie Lovelace, Chief  
Water Protection Bureau

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Date